

Informatik Command

Command-line

By Informatik Inc

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User Guide

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(Please print this user guide for easy reference)

For the latest user guide please go to www.informatik.com/manuals.html

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Overview (Please Read)

The files for Informatik Command can be found in the C:\Program Files\Informatik Inc\InformatikCommand folder, or the folder that you specified when installing the program..

Informatik Command is a command-line driven program that converts graphics files from and to the following formats:

PDF (single or multipage)
TIFF (single or multipage)
BMP, PNG, GIF, JPEG (single page)

Furthermore, the program has file edit capabilities:

Tiff, BMP, PNG, GIF and JPEG files
Text Annotations
Watermarks
Resolutions with or without resampling
Trim borders
Shift image (like panning)
Rotation (with optional conditional rotation)
Inversion

Also:

Append Tiff and PDF files
Split Tiff and PDF multipage files

If the system encounters an error, a beep is sounded and an error message is displayed. Error messages can be disabled by code in the command-line. Errors are also posted to the error log. See Error Log section below.

Most TIFF, PDF, PNG, GIF, BMP and JPEG formats (both source and destination) are supported. There may be certain rare formats that are unsupported, that may not convert correctly and may not give an error message. Please always review critical output files, especially when converting from PDFs.

Always back up all affected files before processing.

The program requires Microsoft .NET Framework 2.0 or higher, freely available from the Microsoft website.

For related other software see Related Software section below.

Some PDF and TIFF formats and some objects of PDF files may not be supported. This is especially true if new options are added to PDF. Always make sure that all affected files are safely backed up so that the original files can be restored and always review the output files. Download and install the latest available version (and fixes) frequently. Licensees are not notified when new versions (or fixes) are available.

Demo Version, Unlock Code

When running the demo version, a demo message is displayed for each conversion. For multi-page files, the message is displayed for the first ten pages. No such nag message is displayed in the licensed version.

When you purchase a license you receive an unlock code. Run the UnlockLicense.exe file (probably in the C:\Program Files\Informatik Inc\InformatikCommand folder) and enter the 24-digit unlock code. Exact spelling of the code is important; we recommend that you copy/paste the code.

The unlock code must be entered on each PC and each User.

Command Line Explained

The command line consists of

- a) the path name to the Reformat Command executable file
- b) the argument string

The path name represents the complete file name of the Reformat Command program, for example c:\Program Files\Informatik Inc\InformatikCommand\Reformatcommand.exe. The ReformatCommand.exe file must be in a folder that also includes various dependency files that are installed with the setup. If the path includes spaces you must encapsulate it in quotes.

The argument string consists of several argument elements that specify the exact conversion you want to do. The source file and the destination file are essential. In addition there may be more argument elements, such as the specifications for the text annotation, watermark, resolution, Tiff compression, etc. Each argument element has a header prefix ending with the equal sign (=). There must be no space in front of the equal sign. The prefixes are not case-sensitive. The argument elements are separated by semi-columns.

Many of the argument elements have sub-sections. For example, the 'Text=' argument element (used for the Text Annotation) has sub-sections for text string, location, font name, font size, opaque/transparent. Lagging unused sub-sections can be left out.

The order of the argument elements is irrelevant; the conversions are executed in a predetermined order. See Order of Execution section below.

Sample of complete command line:

```
C:\somedir\ReformatCommand.exe in=c:\dir\file1.tif; out=c:\dir\file1.pdf
```

Samples of just the argument strings:

```
In=c:\dir\file1.tif; out=c:\dir\file1.pdf  
In=c:\dir\file1.tif; out=c:\dir\file1.pdf; text=Hello World  
In=c:\dir\file1.tif; out=c:\dir\file1.pdf; text=Hello World/1/12/Arial/1  
In=c:\dir\file1.tif; out=c:\dir\file1.pdf; text=Hello World/1/12/Arial/1;mark=Draft  
In=c:\dir\file1.tif; out=c:\dir\file1.pdf; text=Hello World/1/12/Arial/1;mark=Draft; trim=1/1/1/1
```

You will find the files in C:\Program Files\Informatik Inc\InformatikCommand folder, or the folder that you specified when installing the program.

Batch Processing

The program processes one (1) file at one time. If you need to batch process a complete folder you need to use or write your own wrapper program, a simple program that iterates thru the files in a folder and calls the Informatik Command for each file. For a complete sample project (in dotNet) and a compiled usable executable please go to www.informatik.com/files.html and download the project. For a simple code sample also read the .NET Process section below.

Command Line Arguments

The following argument elements are supported:

in=	Source file
out=	Destination file
text=	Annotation
mark=	Watermark
res=	Resolution
rotation=	Rotation
trim=	Trim (cleanup) margins
shift=	Shift image in any direction
invert=	Invert
tiff=	Tiff compression for output file
width=	Fixed width of output document in Inches (optional)
serial=	Start number for incrementing, used with annotation
ow=	Overwrite existing file, Append to existing file
pw=	User password (limited use)
err=	Display error messages

in=

Source file with complete path. Required entry. The string must NOT be encapsulated in quotes.

Examples:

```
.....;in=c:\somedir\somefile.tif;.....  
.....;in=c:\somedir\somefile.pdf;.....
```

out=

Destination file with complete path. Required entry. The string must NOT be encapsulated in quotes. The file name must have one of the following recognized extensions: .tif, .pdf, .bmp, .png, .gif, .jpg. The extension determines the output file format.

See Serialization section below for serializing the output files (one file per page)

Examples:

```
.....;out=c:\somedir\somefile.tif;.....  
.....;out=c:\somedir\somefile.pdf;.....
```

text=

This option is used for a text annotation. The element has the following sections, separated by a slash:

Text string Optional placeholders are:
 [p] for current page
 [pp] number of pages in document
 To start the page number other than 1, use the 'Serial=' option
 DO NOT ENCAPSULATE THE TEXT IN QUOTES.

Because the symbols '/' and ';' are reserved symbols you need to replace them as follows:

/ replace with ##
; replace with ###

Example: for a text annotation of 12/31/10 use a string of 12##31##10.

Location

Six locations are supported:
0 = Bottom left (default)
1 = Bottom center
2 = Bottom right
3 = Top left
4 = Top center
5 = Top right

Or specify the exact location in Inches, like
1.5x2

Font Size Default is 12

Font Name Default is Arial

Opacity Default is transparent. Set to 1 for opaque rendering

Examples:

.....;text=Hello World;.....

.....;text=Hello World/1;.....

.....;text=Hello World/1/16/Courier New/1;.....

.....;Text=Hello World/1// /1;.....

.....;Text=Page [p] of [pp]/1;.....

.....;Text=Document Number [p]/1;Serial=1000;.....

.....;Text=Document Number [p]/1;Serial=000101;.....

.....;Text=Hello World;1.5x2;..... (1.5 Inches horizontal, 2 Inches vertical)

mark=

This option is for a watermark. The watermark is in plain outline letters. The element has two sections, separated by a slash:

Text	Short text string DO NOT ENCAPSULATE THE TEXT IN QUOTES.
Size	A size between 50 and 200, where 100 represents the standard size. No entry is needed for the default 100 size

Examples:

.....;mark=Draft;.....
.....;mark=Confidential/50;.....

res=

This option is the resolution setting. This option is not needed if you want the output file to have the same resolutions as the source file. The element has three sections, separated by a slash:

Horizontal	Value of the horizontal resolution, for example 300
Vertical	Value of the vertical resolution, for example 300. If only the Horizontal resolution is specified, then by default the vertical resolution assumes the same value as the horizontal resolution.
Resampling	Set by default. If resampling is not wanted, then enter a '0'. Resampling Causes the output image to have the same size as the original.

Examples:

.....;res=300;.....
.....;res=/300;.....
.....;res=200/100;.....
.....;res=100/100/0;.....

rotation=

This option rotates the image. The element has two sections, separated by a slash:

Angle	90, 180 or 270
Condition:	Enter 1 if rotation should take place only if the height is larger than the width. Enter 2 if rotation should take place only if the width is larger than the height.

Examples:

.....;rotation=270;.....
.....;rotation=90/2;.....

trim=

This option whites-out a specified width at any of the four sides. This option is ideal for example to remove black borders, punch hole marks, etc. The element has four sections, separated by a slash:

Left Border	Value in Inches
Top Border	Value in Inches
Right Border	Value in Inches
Bottom Border	Value in Inches

Examples:

```
.....;trim=1;.....  
.....;trim=1/1/0.5/0.5;.....  
.....;trim=/0.5/0.5;.....
```

shift=

This option moves the inner image in any of four directions. This option is ideal for example to open up some white space at the bottom in order to insert annotations. The element has two sections, separated by a slash:

Horizontal move	Enter positive value (Inches) to move image to the right. Enter negative value (Inches) to move image to the left.
Vertical move	Enter positive value (Inches) to move image down. Enter negative value (Inches) to move image up.

Examples:

```
.....;shift=1;.....  
.....;shift=-0.5;.....
```

invert=

This option inverts the image, black to white, or vice versa. To activate, set value to 1.

Example:

```
.....;invert=1;.....
```

tiff=

This options specifies the output compression for Tiff files. Except for PDF, if the compression should be the same as the compression of the source file, then do not use this option.

- 4 CCITT4 Group 4 Monochrome. Most commonly used for monochrome. Colors will be converted to dithered black and white.
- 3 CCITT3 Group 3 Monochrome.

Colors will be converted to dithered black and white.

- 1 LZW Monochrome. Not used often for monochrome; use CCITT4 instead. Colors will be converted to dithered black and white.
- 6 JPEG compressed TIFF (excellent compression for photo-type images)
- 8 LZW compression 8-bit color, good compression for most color images.
- 24 LZW compression for either monochrome or color. Highest quality.

Advanced options:

- 41 CCITT4 multistrip
- 42 CCITT4 fillorder2
- 43 CCITT4 multistrip, fillorder2

- 31 CCITT3 multistrip
- 32 CCITT3 fillorder2
- 33 CCITT3 multistrip, fillorder2

Example:

.....;tiff=4;.....

width=

Optional. This option resizes the output file to a fixed width (with proportional height). The value must be entered in Inches. 1 Inch equals 2.54 centimeters.

Examples:

.....;width=8.25.....

serial=

This option is used in conjunction with the Text Annotation. Text annotations have a [p] placeholder for the page number. If you like to insert incrementing numbers that are higher than the page number, set the start number here.

Start Number Starting number for the [p] placeholder in Text Annotation.

Example:

.....;serial=1000;.....

ow=

By default, generally files are not overwritten, except if the source and destination files are the same. To change this default, and let files be appended or overwritten, set the 'Ow' property:

Ow=1 Allow overwrite

Ow=2 Append to existing file.

Use with caution and make sure that all files are backed up before you run this program. Always back up your files.

Example:
.....;ow=1;.....

Note: The ow= option is ignored if you use the output serialization. See Serialization section below. Overwrite is not allowed for pdf-to-pdf functions. Append is allowed only for tif-to-tif or pdf-to-pdf functions.

pw=

Specifies the user password for opening PDF files. This option is available only when converting PDF files to non-PDF formats, for example TIFF. Passwords are case-sensitive.

Example:
.....;pw=xyz123z5;.....

err=

By default, if an error is encountered an error message is generally displayed. To change this default so that error messages are not displayed, set the Err to 'err=0'. Errors are always posted to the Error Log. See Error Log section.

Example:
.....;err=0;.....

Order of Execution

1. Rotation
2. Inversion
3. Resolution
4. Trim
5. Shift
6. annotation
7. watermark

Serialization (Split Serialize Multipage Files)

TIFF and PDF output files can be multipage files. If you want to serialize the multipage output TIFF or PDF file (one file per page), specify the output file name in the format of xyz[+0001].tif where the inserted number represents the starting serial number. In this example the first file would be named xyz0001.tif, the second file would be named xyz0002.tif, etc. You can add a separator symbol like xyz_[+0001].tif.

If a multipage TIFF or PDF file is converted to a format that does not allow multi-pages, an incrementing serial suffix is automatically added to the file names; however you can also specify your own serial with the [+nnn] method.

Graphics Formats

The following graphics formats are supported:

- TIFF, single page, multi-page. Source and Destination, Tiff-to-Tiff.
- PDF, single page, multi-page. Source and Destination, PDF-to-PDF not supported
CCITT4, CCITT3, JPEG, LZW (1, 8 and 24 bits)
- PNG, single page. Source and Destination, PNG-to-PNG
- GIF, single page. Source and Destination, GIF-to-GIF
- BMP, single page. Source and Destination, BMP-to-BMPp
- JPEG, single page. Source and Destination, JPG-to-JPG

Same-to-same conversions can be used for editing the files (annotations, watermarks, rotations, resolutions, trimming, shifting, inversions). PDF-to-PDF is not supported.

Most TIFF, PDF, PNG, GIF, BMP and JPEG formats (both source and destination) are supported. There may be certain rare formats that are unsupported, that may not convert correctly and may not give an error message. Please always review critical output files, especially when converting from PDFs.

Error Log

Errors generally are posted to in the error log files. You will find the error log files in the C:\Documents and Settings\[User Name]\Application Data\Files\InformatikCommand folder. You should clear the folder from time to time.

When an error is posted to the error log, a beep is sounded.

Commandline Execution

The commandline is run in one of the following three modes:

1. From the Windows Run command
2. From the Windows Command Prompt
3. With a Batch (.bat) file
4. In a .NET Process (see separate section below)
5. in batch mode (process entire folder) (see section above)

.NET Process

A simple method to run the Command lines is with a .NET process, as in the following code sample (VB.NET).

Sample Code for converting single file:

```
Dim proc As New Process
proc.StartInfo.FileName = "c:\xxx\reformatcommand.exe"
proc.StartInfo.Arguments = "in=c:\xxx\xxx.tif;out=c:\yyy\yyy.pdf"
proc.Start()
proc.WaitForExit()
Dim exitcode As Integer = proc.ExitCode
```

Sample Code for converting all files in folder and nested subfolders:

```
Sub runit(ByVal dir)
Dim filter As String = "*.tif"
For Each filename As String In IO.Directory.GetFiles(dir, filter)
Dim proc As New Process
Dim outfile= io.Path.ChangeExtension(filename, ".pdf")
proc.StartInfo.FileName = "c:\xxx\reformatcommand.exe"
proc.StartInfo.Arguments = "in=" & filename & ";out=" & outfile
proc.Start()
proc.WaitForExit()
'Dim exitcode As Integer = proc.ExitCode
'error handling
Next
For Each subdir As String In IO.Directory.GetDirectories(dir)
runit(subdir)
Next
End Sub
```

For a complete sample project (in dotNet) and a compiled usable executable please go to www.informatik.com/files.html and download the project.

Error Codes

The process returns an ExitCode:

0	Success
101	Command line is missing
102	Command line syntax error
103	Source file has not been specified
104	Destination file has not been specified
105	Source file does not exist
106	PDF-to-PDF is not supported
107	Cannot open file. File format is not supported, or file is corrupted or encrypted.
111	Incorrect license code.
200	General error. Error information can be looked up in the Error Log files.
300	File already exists. Overwrite not specified.

Troubleshooting

If the system fails, check the following:

- Ensure that you have the .NET Framework 2.0 or later installed on your PC.
- Go to the Error Log (see Error Log section above) and see if an error log was created. The error log can be found in C:\ The error log will give you some information about the problem. The error log can be found in the C:\Documents and Settings\[User Name]\Application Data\ InformatikCommand folder.
- Check the folder that has the ReformatCommand.exe file. Make sure that the following three (3) files are also in that some folder:

PDF4NET
PDFRender4NET
TIFFTEK32

- Make sure that the destination folder and file is NOT read-only.

Related Software

Informatik Inc offers a host of related software products, including:

TiffDLL90

Powerful fully features DLL for graphics conversions and editing. TiffDLL90 has many more conversion and editing options than the Reformat Command program. TiffDLL90 does not support the PDF format.

Informatik Reformat

A powerful desktop program for conversions and editing of graphics formats. Most formats are supported, including many legacy formats. Informatik Reformat supports single file execution and batch processing (folder and nested subfolders).

PDF Complete

A versatile desktop program for converting, editing and processing PDF files. PDF Complete supports single file execution and batch processing (folder and nested subfolders).

Informatik xPrint

Informatik xPrint allows you to convert any printable document to PDF or TIFF. The standard version is free with some unobtrusive attribution. The full version includes markup options.

Customization, Source Code

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